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EXAMINER

BUTLER, PATRICK

ART UNIT PAPER NUMBER

1732

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/757,828

Applicant(s)

PARISH, BART P.

Examiner

Patrick Butler

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 30-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20040115</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-21 and 30-33, drawn to a method, classified in class 264, subclass 140.
- II. Claims 22-26, drawn to a system, classified in class 425, subclass 202.
- III. Claims 27-29, drawn to a product, classified in class 44, subclass 550+.

**The Examiner notes the instance of providing a method within system Claims 22-26. Given this, the system is improper due to not meeting a specific statutory class. For purposes of examination, Claims 22-26 are treated as an apparatus.**

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as blending and grinding meat.

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process

(MPEP § 806.05(f)). In the instant case that the product as claimed can be made by another and materially different process such as by melting the thermoplastic rather than grinding and compressing.

Inventions II and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product such as a ground meat product.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

Art Unit: 1732

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

During a telephone conversation with William Wiese on 13 September 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-21 and 30-33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for manufacturing combustible products.

***Claim Objections***

Claim 31 is objected to because of the following informalities:

- In line 3, it appears that a comma is missing between “grinder” and “the” in the part of the line that now reads “grinder the heat generated in” so that the part would read “grinder, the heat generated in”.
- In line 4, it appears that a semicolon should be a comma between “grinder” and “the” in part of the line that now reads “grinder; the speed of” so that the part would read “grinder, the speed of”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31 is rejected due to the use of a Markush grouping without proper Markush language. With respect to Claim 31, it states, “selected from the group consisting of ... ” without providing the conjunction “and” between the last and second-to-last group members. This appears to be describing a Markush group to follow, and the appropriate Markush language is recommended: placing “and” between the last and second-to-last group members.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cantrell (US Patent No. 6,017,475).

With respect to Claim 1, Cantrell teaches a method of making a product using a combined combustible material of household garbage including plastic bottles and paper (method of making combustible products from recyclable materials; feedstock is ... thermoplastic material, cellulosic fiber) (see col. 1, lines 14-15; col. 5, lines 1-7; col. 11, line 64 through col. 12, line 4). As the household garbage contains materials that have been brought together in the production of the garbage, it is therefore already, to some degree, a blended material (blending feedstock). Cantrell teaches reducing particle size by using a grinder (inputting said blended feedstock into a grinder for the purpose of reducing the size of said blended feedstock) (see col. 9, lines 9-15; col. 11, line 64 through col. 12, line 4), squeezing the shards, applying high pressure, and extruding the material into bricks, blocks, or fire logs (compressing and extruding said reduced blended feedstock through a cuber so as to create combustible products) (see col. 9, lines 54-57; col. 10, lines 17-25 and 35-46; col. 11, lines 20-27). In extruding, the location on the apparatus that the material is extruded from would be the die hole used to form combustible products. Moreover, as the expeller and extruder would constitute

Art Unit: 1732

at least two dies, there would be at least two die holes. It is noted on page 9, lines 5-9, within paragraph [0023], of Applicant's specification that Applicant defines cuber to encompass an apparatus that makes items of a variety of shapes:

The term "cube" refers to a discrete product of any size or shape that contains both cellulosic material and thermoplastic material. The cube need not be square or even symmetrical. While it may be useful to form the products in the shape of cubes, they can be any suitable symmetrical configuration such as the shape of a tube or a sphere.

This limitation is taught by Cantrell's bricks, blocks, and fire logs. With respect to the limitation "substantially" regarding the selection of feedstock, the examiner interprets the limitation to require at least one of the Markush members listed in more than a trace amount. Therefore, the limitation was met by the plastic bottle article as well as wood or cloth taught by Cantrell rather than trace amount such mining waste with mistakenly collected windblown paper litter such as material from a quarry or sheet metal with paper litter or miniscule product labels such as material collected in large construction metal recycling bins.

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jesse (US Patent No. 5,342,418).

With respect to Claim 1, Jesse teaches a process for making palletized fuel using diapers, which contain resin and paper (blending feedstock, wherein said feedstock is selected substantially from the group consisting of thermoplastic material, cellulosic fibers and combinations thereof) (see title; col. 7, lines 22-40 and 49-61). The material



Art Unit: 1732

is put into a shredder (grinder) to reduce their size (see col. 8, lines 31-44). The shredded material has pressure applied to it (compressing) and is pushed out a die (extruding; cuber) to create pellets (combustible products) (see col. 9, lines 1-34). Applicant's definition of cuber as discussed with respect to Cantrell above is applied herein. Thus, as Jesse teaches palletizing, the apparatus meets the limitations of Applicant's cuber.

With respect to Claim 4, Jesse teaches that polyethylene, polypropylene, and polybutylene (thermoplastic material is selected from the group consisting of polyethylene, polypropylene ... polybutylene) are elements of combustion obtained from disposable diapers (feedstock) (see col. 7, 22-40 and 49-61).

With respect to Claims 5 and 6, it is noted that there is no positively claimed step of producing disposable diapers, sanitary pads, adhesive liners, and hospital gowns. Thus, any materials in disposable diapers, sanitary pads, adhesive liners, and hospital gowns would be materially identical to byproducts and waste of production. Jesse teaches using disposable diapers and sanitary pads (hygiene pads) (see col. 7, lines 49-61).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 7, 8, 12, 13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrell (US Patent No. 6,017,475).

Cantrell teaches a method of making combustible products as previously described with respect to claim 1.

With respect to Claims 2, 7, 12, and 17, Cantrell does not appear to explicitly teach that the grinder operating torque is within the claimed range (e.g., between about 18,000 and 20,000 ft-lbs of torque per motor shaft). However, in this regard, Cantrell further teaches that the grinder operates at a rated velocity depending upon the configuration of the machine used and that it rotates so that the work piece is ground to the desired shape, size, and finish (see 9, lines 27-35). Given that the velocity and material is ground properly, the torque would be a function of these variables. As such, Cantrell obvious recognizes that the grinder operating torque is a result-effective variable. Since that the grinder operating torque would be a result-effective variable, one of ordinary skill in the art would have obviously determined the optimum grinder operating torque applied in the process of Cantrell through routine experimentation based upon rated velocity and grinding to the desired shape, size, and finish.

With respect to Claims 3, 8, 13, and 18, Cantrell does not appear to explicitly teach that the grinder operating speed is within the claimed range (e.g., between about 75 to about 80 rpms). However, in this regard, Cantrell further teaches that the grinder operates at a rated velocity depending upon the configuration of the machine used and that it rotates so that the work piece is ground to the desired shape, size, and finish (see 9, lines 27-35). As such, Cantrell obvious recognizes that the grinder operating speed

Art Unit: 1732

is a result-effective variable. Since that the grinder operating speed would be a result-effective variable, one of ordinary skill in the art would have obviously determined the optimum grinder operating speed applied in the process of Cantrell through routine experimentation based upon rated velocity and grinding to the desired shape, size, and finish.

Claims 4-6, 9-11, 14-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrell (US Patent No. 6,017,475) as applied to claims 1, 7, 12, and 17 above, and further in view of Jesse (US Patent No. 5,342,418).

With respect to Claim 4, 9, 14, and 19, Cantrell teaches making combustible products from recyclable materials as previously described. Cantrell teaches using combustible rubbish (see col. 1, lines 13-16 and 25-31) including plastic bottles (see col. 5, lines 1-7).

Cantrell does not appear to expressly teach polyethylene, polypropylene, and polybutylene as components of the combustible rubbish.

Jesse teaches that polyethylene, polypropylene, and polybutylene (thermoplastic material is selected from the group consisting of polyethylene, polypropylene ... polybutylene) are elements of combustion obtained from disposable diapers (recyclable materials) (see col. 7, 22-40 and 49-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the polymers in disposable diapers as taught by Jesse in the process of making combustible products as taught by Cantrell because Cantrell requires combustible rubbish and Jesse teaches combustible disposable material.

Art Unit: 1732

Moreover, Jesse teaches that the material is well known to be recycled to make combustible products (see col. 7, 22-40 and 49-61).

With respect to Claims 5, 6, 10, 11, 15, 16, 20, and 21 it is noted that there is no positively claimed step of producing disposable diapers, sanitary pads, adhesive liners, and hospital gowns. Thus, any materials in disposable diapers, sanitary pads, adhesive liners, and hospital gowns would be materially identical to byproducts and waste of production. Jesse teaches using disposable diapers and sanitary pads (hygiene pads) (see col. 7, lines 49-61).

Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrell (US Patent No. 6,017,475) as applied to Claim 1 above, and further in view of Wesley et al. (US Patent No. 4,789,507).

Cantrell teaches a method of making combustible products as previously described with respect to claim 1.

With respect to Claims 30 and 31, Cantrell does not appear to explicitly teach that the grinder operating torque is within the claimed range (e.g., between about 18,000 and 20,000 ft-lbs of torque per motor shaft). However, in this regard, Cantrell further teaches that the grinder operates at a rated velocity depending upon the configuration of the machine used and that it rotates so that the work piece is ground to the desired shape, size, and finish (see 9, lines 27-35). Given that the velocity and material is ground properly, the torque would be a function of these variables. As such, Cantrell obvious recognizes that the grinder operating torque is a result-effective variable. Since that the grinder operating torque would be a result-effective variable,

Art Unit: 1732

one of ordinary skill in the art would have obviously determined the optimum grinder operating torque applied in the process of Cantrell through routine experimentation based upon rated velocity and grinding to the desired shape, size, and finish.

Cantrell does not expressly teach monitoring the operational characteristics of said grinder and cuber using a software application. It is noted that there is no claimed step of controlling, regardless of any data "monitor[ed]." Therefore, any mentioning of any process monitoring involving 1) software and 2) a grinder or extruder (cuber) would meet the limitations of the claim since any parameter could be used to control the process regardless of whether or not specific controlling is taught.

Wesley teaches that when using an extruder, the speed of the extruder (cuber; speed of the cuber) is monitored as well as the pump outlet pressure (cuber; the pressure required to perform the cubing operation) (see col. 8, lines 41-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Wesley's monitoring with Cantrell's process of making combustible products in order to form a feedback control of the process as well as to control the rate of flow into the extruder (cuber) (see col. 8, lines 41-56).

With respect to Claim 32, Cantrell does not appear to explicitly teach that the grinder operating speed is within the claimed range (e.g., between about 75 to about 80 rpms). However, in this regard, Cantrell further teaches that the grinder operates at a rated velocity depending upon the configuration of the machine used and that it rotates so that the work piece is ground to the desired shape, size, and finish (see 9, lines 27-35). As such, Cantrell obvious recognizes that the grinder operating speed is a result-

Art Unit: 1732

effective variable. Since that the grinder operating speed would be a result-effective variable, one of ordinary skill in the art would have obviously determined the optimum grinder operating speed applied in the process of Cantrell through routine experimentation based upon rated velocity and grinding to the desired shape, size, and finish.

Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrell (US Patent No. 6,017,475) in view of Wesley et al. (US Patent No. 4,789,507) as applied to claim 30 above, and further in view of Jesse (US Patent No. 5,342,418).

With respect to Claim 33, Cantrell in view of Wesley teaches making combustible products from recyclable materials as previously described. Cantrell teaches using combustible rubbish (see col. 1, lines 13-16 and 25-31) including plastic bottles (see col. 5, lines 1-7).

Cantrell does not appear to expressly teach polyethylene, polypropylene, and polybutylene as components of the combustible rubbish.

Jesse teaches that polyethylene, polypropylene, and polybutylene (thermoplastic material is selected from the group consisting of polyethylene, polypropylene ... polybutylene) are elements of combustion obtained from disposable diapers (recyclable materials) (see col. 7, 22-40 and 49-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the polymers in disposable diapers as taught by Jesse in the process of making combustible products as taught by Cantrell because Cantrell requires combustible rubbish and Jesse teaches combustible disposable material.

Art Unit: 1732

Moreover, Jesse teaches that the material is well known to be recycled to make combustible products (see col. 7, 22-40 and 49-61).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mo.-Th. 7:30 a.m. - 5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*PB*

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10/2/06